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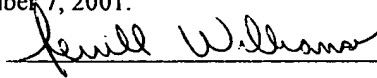
## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Crossman et al. Application No: 09/578,534 Filed: May 24, 2000 For: <i>Diagnostics and Therapeutics for Restenosis</i>	Examiner: Myers, C. Group Art Unit: 1655  Attorney Ref. No: MSA-017.02
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Assistant Commissioner for Patents  
Washington, DC 20231

## CERTIFICATE OF FIRST CLASS MAILING (37 CFR 1.8 (a))

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR 1.97 (c)**

Sir:

In accordance with 37 CFR § 1.97(c)(1) and (e)(1), Applicants submit the following publications, which were cited in a counterpart PCT application (PCT/US00/14299), for the Examiner's consideration. These publications are cited on the enclosed Form PTO-1449, and a copy of each publication is also being submitted herewith.

Pursuant to 37 CFR § 1.97 (c)(1) and (e)(1), the undersigned hereby certifies that each item of information contained in the Information Disclosure Statement, and listed as references "CA" - "CE" on the enclosed Form PTO-1449, was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of

this Information Disclosure Statement. The foreign communication to which reference is made is an International Search Report dated November 8, 2001.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form 1449.

This submission does not represent that a search has been made or that no better art exists, nor does it constitute an admission that the cited documents are material or constitute "prior art." If the Examiner applies the listed documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of said document.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the referenced documents be applied against the claims of the present application.

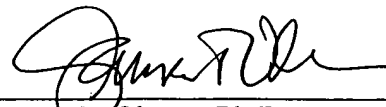
No fees are believed to be due with this filing. If there are any fees due in connection with this filing, however, please charge the appropriate fees as required under 37 C.F.R. § 1.17(p) to our **Deposit Account No. 06-1448**.

Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at (617) 832-1000.

Date: December 7, 2001

**Customer No. 25181**  
Patent Group  
Foley, Hoag & Eliot LLP  
One Post Office Square  
Boston, MA 02109-2170

Respectfully Submitted,



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James T. Olesen, Ph.D.  
Reg. No. 46,967  
Agent for Applicant

Form PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**

(Use several sheets if necessary)

Docket Number (Optional)  
MSA-017.02

Application Number  
09/578,534

Applicant  
Crossman et al.

Filing Date  
May 24, 2000

Group Art Unit  
1655

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	CA	WO 98/40517	9/17/98	PCT			

**OTHER DOCUMENTS**

(Including Author, Title, Date, Pertinent Pages Etc.)

	CB	Francis, S.E. et al. (1999), <i>Interleukin-1 Receptor Antagonist Gene Polymorphism and Coronary Artery Disease</i> , CIRCULATION 99(7):861.
	CC	Kastrati, A. et al. (2000), <i>Protection Against Restenosis From an Interleukin-1 Receptor Antagonist Gene Polymorphism in Patients Treated With Coronary Stenting</i> , J. AM. COLLEGE CARDIOLOGY 35(2):36A.
	CD	Kornman, K.S. et al. (1999), <i>Interleukin-1 Genotypes and the Association Between Periodontitis and cardiovascular Disease</i> , J. PERIODONT. RES. 34:353.
	CE	Zee, R. et al. (1999), <i>Genetic Risk Factors for Post-PTCA Restenosis: A Comprehensive Analysis of Multiple Candidate Genes</i> , CIRCULATION 110(18):755.
EXAMINER	DATE CONSIDERED	

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Crossman et al.

Application No: 09/578,534

Filed: May 24, 2000

For: Diagnostics and Therapeutics For  
Restenosis

Examiner: Myers, C.

Art Unit: 1655

Attorney Document No.: MSA-017.02  
(20974-1702)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231, on: 4/16/00, 2001

  
Robert King

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR 1.97 (b)(3)**

Commissioner for Patents  
Washington, DC 20231

Sir:

Submitted herewith on Form PTO-1449 is a list of documents known to Applicants and/or their attorney/Agent in compliance with the requirements of 37 CFR 1.56.

Under 35 U.S.C. § 120, this application has the benefit of the earlier filing date of the parent application Serial No. : 09/431,352 filed on November 1, 1999. Copies of the listed references (AA-BD) in the attached form PTO 1449 were submitted to the Office in the parent application and therefore are not required in this application as provided under 37 C.F.R. 1.98(d).

Applicants respectfully request that the Examiner consider the listed documents and indicate they were considered by making appropriate notations on the attached Form 1449.

This submission does not represent that a search has been made or that no better art exists. Nor does it constitute an admission that the cited documents are material or constitute

"prior art." If the Examiner applies the listed documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the referenced documents be applied against the claims of the present application.

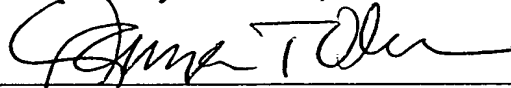
Under 37 C.F.R. § 1.97 (b)(3), this Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits; therefore, no fee is believed to be due in connection with this submission. However, the Commissioner is authorized to charge any deficiencies or credit any overpayment to/from our **Deposit Order Account No. 06-1448**.

Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at (617) 832-1764.

Date:

Patent Group  
Foley, Hoag & Eliot LLP  
One Post Office Square  
Boston, MA 02109-2170

Respectfully Submitted,



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James T. Olesen, Ph. D.  
Reg. No. 46,967  
Agent for Applicants

Form PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION**  
(Use several sheets if necessary)

Docket Number (Optional)  
MSA-017.02(20974-1702)Application Number  
09/578,534Applicant  
Crossman et al.Filing Date  
May 24, 2000Group Art Unit  
1655

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA 4,582,788	04/15/86	Erlich	435	6	01/ 07/ 83
	AB 4,623,619	11/18/86	Owerbach et al.	435	6	02/ 18/ 83
	AC 4,666,828	05/19/87	Gusella	435	6	08/ 15/ 84
	AD 4,801,531	01/31/89	Frossard	435	6	09/ 30/ 85
	AE 4,965,188	10/23/90	Mullis et al.	435	6	06/ 17/ 87
	AF 5,110,920	05/05/92	Erlich	536	27	08/ 30/ 88
	AG 5,268,267	12/07/93	Smith	435	6	11/ 01/ 89
	AH 5,554,509	09/10/96	Collucci et al.	435	6	01/ 26/ 96

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

**OTHER DOCUMENTS**

(Including Author, Title, Date, Pertinent Pages, Etc.)

AI	Alexander R. W., "Inflammation and Coronary Artery Disease ", The New England Journal of Medicine, 331(7): 468-469 (1994).
AJ	Anderson & King, "Modern Approaches to the Diagnosis of Coronary Artery Disease", Am. Heart J. 123(5): 1312-1323 (1992)
AK	Badimon, et al., " Coronary Atherosclerosis: A Multifactorial Disease", Supplement II Circulation, 87 (3): II-3 -II -16 (1993).
AL	Clark, et al., "Genomic Sequence for Human Prointerleukin 1 beta: Possible Evolution from a Reverse Transcribed Prointerleukin 1 alpha gene", Nuc. Acids Res. 14 (20) : 7897- 7914 (1986). Erratum in Nuc. Acids Res. 15 (2):868 (1987).
AM	Clay, et al., "Interleukin 1 Receptor Antagonist Gene Polymorphism Association with Lichen Sclerosus", Hum. Genet. 94 : 407-410 (1994).
AN	Clay, et al., " Novel Interleukin-1 Receptor Antagonist Exon Polymorphisms and their use in Allele-specific mRNA Assesment", Hum. Genet. 97 (6): 723-726 (June 1996).
AO	di Giovine et al., "Single Based Polymorphism at -511 in the Human Interleukin -1 $\beta$ Gene (IL 1 $\beta$ )", Human Molecular Genetics 1 (6) : 450 (1992).
AP	Dinarello, et al., "Anticytokine Strategies in the Treatement of the Systemic Inflammatory Response Syndrome", JAMA, 269(17) : 1829-1835 (1993).
AQ	Dinarello, et al., "The Role of Interleukin-1 in Disease", The New England Journal of Medicine 328(2): 106- 113 (Jan. 1993).

AR	Duff, "Molecular Genetics of Cytokines", The Cytokine Handbook(1994) 2 <sup>nd</sup> ed. Chap. 2 :21-30.
AS	Galea, et al., "Interleukin-1 $\beta$ in Coronary Arteries of Patients With Ischemic Heart Disease", Ath. Thromb. And Vasc. Biol., 16(8): 1000- 1006 (Aug. 1996).
AT	Hasdai, et al., "Increased Serum Concentrations of Interleukin- 1 $\beta$ in Patients with Coronary Artery Disease", Heart, 76: 24-28 (1996).
AU	Knox, "Discovery may help battle heart attacks", Houston Chronicle(1/10/96).
AV	Liuzzo, et al., "The Prognostic Value of C-reactive Protein and Serum Amyloid A Protein in Severe Unstable Angina", N.E.J.M. 331(7): 417-424 (1994).
AW	Mansfield et al., "Novel Genetic Association Between Ulcerative Colitis and the Anti-inflammatory Cytokine Interleukin- 1 Receptor Antagonist", Gastroenterology 106 (3):637-642 (1994).
AX	Munro & Cotran, "Biology of Disease ; The Pathogenesis of Atherosclerosis: Atherogenesis and Inflammation", Lab. Invest. 58(3):249- 261.
AY	Nicklin, et al., "A Physical Map of the Region Encompassing the Human Interleukin-1 $\alpha$ , Interleukin-1 $\beta$ , and Interleukin-1 Receptor Antagonist Genes", Genomics 19: 382- 384 (1994).
AZ	Tarlow, et al., "Polymorphism in Human IL -1 Receptor Antagonist Gene Inton 2 is caused by Variable Numbers of an 86- bp Tandem Repeat", Hum. Genet. 91: 403-404 (1993).
BA	Tarlow, et al., "Severity of Alopecia Areata Is Associated with a Polymorphism in the Interleukin -1 Receptor Antagonist Gene", J. Invest. Dermatol. 103: 387- 390 (1994).
BB	Cox et al.; "An Analysis of Linkage Disequilibrium in the Interleukin-1 Gene Cluster, Using a Novel Grouping Method for Multiallelic Markers", Am. J. Hum. Genet. 62: 1180-1188, ( 1998)
BC	Libby Peter, MD; "From Bench to Bedside: Molecular Bases of the Acute Coronary Syndromes", Circulation, 91(11): 2844-2850, (June 1, 1995)
BD	Ross Russell; "The Pathogenesis of Artherosclerosis: A Perspective for the 1990s ", Nature, 362: 801-809, (April 29, 1993)
EXAMINER	
DATE CONSIDERED	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.	

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